All comment letters received contained substantive comments. All letters were within the scope of the proposed action, specific to the proposed action and had a direct relationship to the proposed action and included supporting reasons for the Responsible Official to consider, i.e. at least one of not all of the points in each letter described information relevant to the project and contained supporting rationale. Individuals or organizations that provided substantive comment are,

Southwest Forest Alliance
Sharon Galbreath, Executive Director

Grand Canyon Trust
Michele James

Center for Biological Diversity
Brian Segee

Greater Flagstaff Forests Partnership
Tom Kolb

Plateau Group, Sierra Club
Roxane George

Bruce Johnson

John Horning, Executive Director
Forest Guardians

Sam Hitt, Founder
Wild Watershed

Letters received are shown below. Statements about how the comments were considered are in *italics*

SOUTHWEST FOREST ALLIANCE

P.O. Box 1948 • Flagstaff, AZ, 86002 •928-774-6514 • Fax 928-774-6846

February 16, 2004

Gene Waldrip
District Ranger
Peaks Ranger District

5075 N. Highway 89
Flagstaff, AZ 86004-2852

Dear Mr. Waldrip,

The Southwest Forest Alliance, the Plateau Group of the Sierra Club and Center for Biological Diversity have several comments regarding the Woody Ridge Draft Environmental Analysis (DEA).

Section One - Alternative C

We would like to see the Forest Service choose Alternative C to meet the stated wildlife and old growth management objectives in the Woody Ridge DEA. The Forest Service could create a variation of Alternative C that would also allow for achieving Forest Service fire risk reduction goals. An alternative with a 16 inch diameter cap on the project area outside of the urban corridors would allow more extensive thinning within wildland urban interface while maintaining the larger diameter trees that the project area is deficit in. Retaining large diameter trees is especially critical in the Woody Ridge area given the treatments that have occurred on state land parcel through out the analysis area.

According to the economic analysis, a market does not currently exist in Northern Arizona for 16 inch plus diameter trees that makes them any more valuable than smaller diameter trees. As a result the cost to implement either alternative should be the similar. In the case of Woody Ridge, the Forest Service has the economic opportunity to make a decision that preserves large diameter trees for wildlife habitat and old growth development.

This comment supports Alternative C as the preferred alternative and suggests an additional option of no diameter cap with urban corridors. As noted in this comment, the EA describes that the cost of implementing either Alternative A or Alternative C are similar. Create a dollar value from large diameter trees has never been a goal of this project, therefore the fact that the cost would be the same, does not provide a reason for choosing Alternative C over Alternative A. This comment mentions that treatments have occurred on State land, but fails to discuss the ecological values that make choosing Alternative C "critical" related to the State Lands.

Even though the Woody Ridge DEA states that SDI is a guide, not a rigid requirement, it is used in all of the alternative comparisons and effects analysis to asses the difference between A and C. Achievement of the purpose and need statements related to vegetation and fire appear to be heavily tied to SDI. This would be occurring if the Forest Service is using SDI to determine canopy. Several of our questions and conversations at the open house related to the use of SDI in the effects modeling.

The Forest Service is using SDI to measure canopy closure in spite of the fact that SDI was not developed to measure canopy and does not capture the natural range of variability. SDI does not use canopy closure as a component in its calculations. We can understand why SDI is attractive to the Forest Service. It allows land managers to express canopy closure in stem densities making it easier to calculate timer volume and mark trees. Has the model been updated to deal with these limitations?

Stand Density Index (SDI) is a measure of stocking which describes density and goes beyond the simple measures such as basal area to represent irregularly structured stands. In other words, SDI can distinguish between stands with similar basal area but different diameter distributions. It was used to display the effects of the alternatives along with other measurements such as, trees per acre, canopy closure, basal area, and quadratic mean diameter. SDI was not used to measure canopy closure. Estimates of canopy closure were generated by the Forest Vegetation Simulator (FVS) as output in a report describing stand structure.

Section Two: Old growth Allocation

We support the Forest Service decision to not log any mature (old growth) ponderosa pine trees. As the DEA recognizes the Woody Ridge area has been heavily logged and cannot meet existing old growth requirements. Because of this deficit we are opposed to logging the large diameter trees that will most quickly develop into old growth.

Designating only 20% of the analysis area as existing and developing old growth satisfies the absolute minimum requirements of the Forest Plan. However, such a minimal designation does not address the issues of old growth as an ecosystem process. A minimal old growth designation and corresponding lack of protection profoundly undermines the wildlife management goals stated in the proposed action.

> *Minimum percentages and minimum attributes in Forest Plan Standards and Guidelines for old growth management have evolved into maximums when applied to site-specific actions. Standards are to allocate no less than 20 percent of each forest ecosystem management area to old growth. The standards also state to provide as much old growth as can be sustained in patterns that provide for a flow of functions and interactions at multiple scales across the landscape through time.*

Desginating old-growth at 20% is appropriate because additional acres will result in large, old trees over time. In 20 years it is estimated that 32 % of the project area will be Vegetative Structural Stage (VSS) 5 (Mature forest – trees 18-23.9 inches). In 50 years it is estimated that 37% will be VSS5 and 6 percent will be VSS 6 (Old Forest 24+). Overall, a postitive effect in maintaining the existing older, yellow-barked trees and developing additional mature and old forest trees should occur as a result of the level of density reduction prescribed in Alternative A.

With the 1996 Amendments to the forest plans, the Forest Service assumed that meeting the structural stage requirements in the MRNG would provide for old growth over time. However, the Forest Plan Amendments contained no analysis regarding the effects to old growth, existing or developing, that would be logged as "surplus" old

growth in diversity units. The MRNG, upon which the structural stages in the forest plan are based, did not assess this impact to then existing old growth conditions.

There is no "surplus" old growth in the Woody Ridge project area. Under the current condition only 4% of the project area is VSS 5 and zero percent occurs as VSS 6. Within VSS5 stands, 227 acres are thinned from below, 5 acres are burned only, and the remaining 159 acres are part of the untreated slopes of Fry Canyon.

See the discussion of MRNG below.

Section Three - MRNG

All of the effects related to the purpose and need statement for vegetative structural stages and the alternative comparisons are based on the Management Recommendations for the Northern Goshawk (MRNG). An EIS Must Be Done on the Site-Specific Implementation of the Management Recommendations for the Northern Goshawk (MRNG) Because the Forest Service Never Conducted an EIS on the Impacts of the MRNG.

The 1996 regional amendments, ostensibly designed primarily to protect and recover the federally listed Mexican spotted owl and the Forest Service sensitive Northern goshawk, consist of standards and guidelines (S &G's) addressing the MSO, goshawk, grazing management, and old growth. The S & G's for the goshawk and the MSO essentially implemented the MRNG and MSO Recovery Plan, respectively. Applying to all forested and woodland communities, the standards and guidelines are now crucial components of all eleven Region Three Forest Plans.

Unfortunately, the ROD and Final Environmental Impact Statement for Amendments to Eleven Southwestern National Forest Plans not only failed to analyze effects on Northern goshawks in light of the best scientific data, they failed to provide any analysis at all. Because the MRNG has never been subjected to the proper NEPA analysis, the Forest Service must do so now before it implements the Woody Ridge timber sale.

As the Forest Service is well aware, adoption of the MRNG has been plagued by controversy and confusion since the Goshawk Scientific Committee, comprised exclusively of Forest Service personnel, was convened to begin development on the guidelines. Objections have been both procedural and substantive. Procedurally, the Forest Service has essentially rammed the MRNG into the S & G's without the public and scientific scrutiny required by the National Environmental Policy Act (NEPA). The substance of the MRNG may explain why nearly all of the MRNG's fundamental assumptions have been roundly condemned by the U.S. Fish and Wildlife Service, the Arizona and New Mexico Game and Fish Departments, independent scientists, and the Southwestern environmental community.

At the center of these objections is the Forest Service's fundamental mischaracterization of the goshawk's foraging behavior. The vast majority of scientific literature on the goshawk demonstrates that the goshawk is a habitat specialist, dependent on the closed canopy, multi- layered, and extensive, unfragmented stands once typical of Southwestern old growth forests. The MRNG, however, is instead premised on the assumption that the goshawk is a forest generalist. Oddly, this premise is based on only three studies of goshawk behavior, two of them conducted in Sweden. Based on this assumption of a habitat generalist, logging prescriptions under the MRNG are designed to create open canopied, highly fragmented, and edge heavy forests. The implication of this strategy is widely agreed upon by the scientific community; instead of being a safety and recovery net for the goshawk, the MRNG may well be the blunt scissors slowly fraying the last strands of that net. And as the goshawk, like any native species, is a crucial component of the ecosystems which it inhabits, the MRNG's affect on the goshawk will certainly also have wide ramifications for the other inhabitants of Southwestern forests, from mycorrhizal fungus to the Pygmy nuthatch to Merriam's turkey, to the forest itself.

A decision that would implement the Forest Service's preferred Alternative A may not go forward at this time as the 9th Circuit Court of Appeals has found the NEPA process accompanying the Forest Service's adoption of the MRNG to be inadequate. Center for Biological Diversity v. U.S. Forest Service, 349 F.3d 1157 (2003). In reaching its decision, the court found that the Forest Service had failed to disclose or acknowledge the scientific opinion held by the U.S. Fish and Wildlife Service, Department of Interior, Arizona Department of Game and Fish, New Mexico Department of Game and Fish and independent goshawk researchers that the species is a habitat specialist dependent on mature, closed canopy forests for its nesting, breeding and foraging ("we find that the Final EIS fails to disclose and discuss responsible opposing scientific viewpoints in the final statement itself in violation of NEPA and the implementing regulations"). In contrast, the MRNG characterizes the goshawk as a habitat generalist, and thus permits the type of extensive logging of large trees contemplated by the Woody Ridge Alternative A.

The court in Center for Biological Diversity made clear that the EIS underlying adoption of the MRNG is fatally flawed, thus "remand[ing] the final statement to the Forest Service for further proceedings consistent with this opinion." As the NEPA underlying the MRNG has been found legally insufficient, the Forest Service clearly cannot move forward with the removal of larger diameter trees under the MRNG, as contemplated by Alternative A.

However, the Forest Service is not precluded from taking action on the Woody Ridge analysis area, and can clearly move forward with implementation of an alternative that focuses on the removal of small diameter trees. Such action would enable the Forest Service to meet the important goals of fuels reduction and habitat improvement while avoiding the controversial cutting of large trees underlying the court's decision in the

goshawk case. Thus, we urge the Forest Service to view the court's rejection of the MRNG as an opportunity to implement a landscape level project focused exclusively on the removal of small trees and prescribed burning treatments.

On February 2, 2004, the Forest Service published in the Federal Register a Notice of Intent to do the following:

"The Forest Service, Southwestern Region, is preparing a Supplement to the Final Environmental Impact Statement (FEIS) for Amendment of Forest Plans in Arizona and New Mexico to disclose, review, and assess scientific arguments challenging the agency's conclusions over the northern goshawk's habitat preferences. The supplement will update the FEIS which amended the eleven Forest Plans in the Region for northern goshawk, Mexican spotted owl, and old growth standards and guidelines in June 1996."

Any final decision on Woody Ridge must also take into account Forest Service intention to reassess the science surrounding the MRNG. An accurate assessment is likely to end with a conclusion that could result in a different decision regarding the logging larger diameter trees in the Woody Ridge area.

As you noted in your comment The Region is proceeding with a supplementary EIS for the 1996 Forest Plan Amendments for the Mexican spotted owl and the northern goshawk. In the interim we intend to proceed with the current direction in the Forest Plan. A literature review prepared by Dr. Richard Reynolds concerning the use of the current goshawk management guidelines has been considered in our effects analysis and added to the project record (PRD#149)

The effects of the preferred alternative are analyzed at the project level (PRD#126 Wildlife Report).

Section Four - Dry Lake Trail.

Given the poor condition of the Aspen clone is this area we would recommend not building a trail at this time. Instead the Forest Service should fence off the area to allow this critical habitat component an opportunity to recover. Any further disturbance in this area could have a negative effect on Mexican spotted owl recovery.

The new trail would not pass through the aspen stands. The new trail is located to allow viewing of the aspen, and measures are included to discourage off-trail hiking. Associated social trail obliteration within the MSO PAC benefits MSO habitat in this area.

Sincerely,

Sharon Galbreath

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GRAND CANYON TRUST

17 February 2004

Gene Waldrip, District Ranger
Peaks Ranger District
Coconino National Forest
5075 North Highway 89
Flagstaff, Arizona 86004

Re: Woody Ridge Draft Environmental Assessment

Thank you for the opportunity to comment on the Draft Environmental Assessment for the Woody Ridge Forest Restoration Project.

Grand Canyon Trust is a regional conservation organization dedicated to protecting and restoring the canyon country of the Colorado Plateau. We appreciate the time and energy that Coconino National Forest staff has spent developing the Woody Ridge Forest Restoration Project in conjunction with the Greater Flagstaff Forests Partnership. Please consider the following comments in your consideration of a decision on the Woody Ridge Forest Health Project.

Upper Diameter Limit: We appreciate that the Coconino National Forest chose to analyze a 16" cap alternative. That analysis, as described in the Environmental Assessment (page 53) and subsequent memoranda from Peaks Ranger District staff to the GFFP project team, indicates that 82% of the project area could be implemented with a 16" cap without compromising project objectives. Because combining elements of various alternatives prior to rendering a decision is within the Forest Service's regulatory authority, Grand Canyon Trust urges the Forest Service to adopt a final alternative, and issue a decision, that imposes a 16" cap across the subject 82% of the project area. In light of the Forest Service's analysis, a decision to cut trees larger than 16" across the entire project area, effectively absent an ecological need to do so, will be understandably controversial.

The rationale for implementing a cap on 82% of the project area is to limit controversy. Only 18 letters and e-mails were received in response to the proposed action for the Woody Ridge project which was published in May of 2003. Of these, only one letter suggested a 16-inch cap. A news brief was published in the Arizona Daily Sun prior to an open house held on May 17th, 2003. At this open house approximately 25 people attended and there was little discussion of a 16-inch cap at that time. The Peaks District Ranger received e-mails related to the 16-inch cap, only from the one organization that commented about a 16-inch cap. Other than this one group, the Peaks District Ranger has received no phone calls, e-mails or office visits from people expressing concern over large trees. There have been few if any newspaper or magazine articles written about the Woody project. In the Governor's recent news release and visit to Flagstaff, diameter caps and large trees were not mentioned. During the formal comment period 5 letters and e-mails were received. Of the 5 letters, 3 supported a 16-inch cap. There were no

additional e-mails, phone calls, media requests or articles written during the EA comment period. The conclusion drawn from public participation, media activity and communication with the District Ranger do not support the claim that selecting Alternative A will be highly controversial. After analyzing Alternative C in detail, there is no information to support implementing a cap.

Monitoring: The Draft Environmental Assessment only addresses monitoring of Mexican spotted owl PACs, protected, restricted and threshold habitat. It does not include a comprehensive monitoring plan for the project. At the very least, the Environmental Assessment should include a monitoring plan that would validate or refute that actual project effects fall within the range of predicted effects disclosed in the effects analysis. In addition, the monitoring plan should look closely at the response of important ecological factors such as wildlife habitat conditions and ground cover enhancement. The details of this plan (monitoring topics, protocols, re-evaluation triggers, funding mechanisms) should be disclosed with a decision to proceed with the project. If funding is an issue, the project or pertinent parts of the project should not be implemented until funding for monitoring can be secured.

Monitoring to validate or refute that the actual project effects fall within the range of predicted effects is not necessary because there are no anticipated significant environmental effects predicted. The types of activities are not unique and the Forest Service has had experience implementing these kinds of activities on a similar (even the same) landscape. Therefore, no action needs to be postponed in order to include a formal monitoring project.

Implementation coordination is a standard procedure undertaken during project implementation and these tasks are described on page 36-37 of the EA. These tasks help ensure that actions activities are designed and laid out correctly on the ground.

There are many questions about Forest restoration and management that could be asked and answered through additional monitoring efforts on this and other project areas on the Peaks District. None of these questions are specific to just the Woody Ridge Project area. During the Woody Ridge project analysis there were no specific monitoring projects proposed. Funding has not been available to plan, implement and evaluate additional monitoring projects on the District.

Just because a monitoring project is not described in an EA and Decision Notice (DN) does not mean it could not be proposed at a later date, on this or other project areas on the Peaks District.

Monitoring Requirements for Management Indicator Species: Recent court rulings have established that implementing regulations of the National Forest Management Act require the Forest Service to monitor population trends of Management Indicator Species at the planning area scale. Courts have established that monitoring population trends requires collecting and analyzing hard population data. Courts have also defined “planning area” to mean project-scale rather than Forest-scale. Unless the Coconino National Forest collects hard population data for Management Indicator Species from within the Woody project area, a decision to implement the Woody Ridge Forest Restoration Project “as is” could be rendered unlawful and may be

vulnerable to time-consuming litigation. As we did for the Kachina Village Forest Health Project area and planning process, we urge the Forest Service to collect and analyze hard population data for Management Indicator Species from within the Woody Ridge Forest Restoration Project area in order to determine population trends as required by implementing regulations of the NFMA. At the very least, the Coconino National Forest should update its 2002 Forest-wide MIS population trends report to reflect current trends by compiling a 2004 Management Indicator Species population trends report prior to rendering a decision on the Woody Project.

Species population trend analysis as required in NFMA is appropriately addressed at the Forest Plan level. There is a national effort to establish inventory and monitoring for multiple species and is expected to be initiated on the Forest in 2004.

In addition, Habitat Quality Index (HQI) modeling for Management Indicator Species (MIS) was completed for the Woody Ridge Project. The HQI modeling indicates the project is not expected to have a detectable effect on the population trend for any MIS with the exception of pronghorn where treatments may have a positive effect on the population (Wildlife Report PRD#126).

The MIS Status Report for the Coconino National Forest summarizes current knowledge of population and habitat trends for species identified as Management Indicator Species (MIS) for the Coconino National Forest. There has not been any new inventory, monitoring or habitat information that indicates a change in trend for the MIS species analyzed in the Woody project since the document was compiled in 2002.

URIZ: Grand Canyon Trust's scoping comments raised concerns about the distance that fire hazard reduction emphasis thinning would extend from private property boundaries. The Urban-Rural Influence Zone, as described in the Flagstaff Lake Mary Ecosystem Assessment Record of Decision, extends approximately 0.5 miles from private property boundaries and establishes a zone in which reduction of fire hazard for the purpose of public safety is a primary management objective. Our concerns raised in scoping comments rested in the distance from private property in which public safety would constitute a primary management objective. We agree that public safety should be a primary management objective immediate to private property, but we disagree with the notion that public safety should be the primary management objective miles from private property. In those areas farther from town, fire hazard reduction should occur within the context of forest restoration that includes multiples management objectives. Therefore, we are concerned about the emphasis on wildfire hazard reduction thinning proposed outside the URIZ along 89A in the southern reaches of the Woody Project. We urge the Forest Service to change those areas from a fire hazard reduction emphasis to forest restoration emphasis in order to meet fire hazard reduction objectives *and* objectives such as wildlife thermal and hiding cover.

There are two ways to respond to this question. First, this comment seems to say that stands with treatments aimed at a fire risk reduction emphasis are not 'forest restoration treatments'. Natural fire in these areas likely consisted of low-intensity and frequent ground fire. A higher fire frequency likely resulted in fewer stems per acre than currently exist. The fire risk reduction

emphasis treatments 'restore' this fire cycle more quickly and more completely than other treatment emphasis. The public safety goal of creating conditions where a crown fire will drop to a ground fire, is the same as the restoration goal of re-introducing fire's role in the ecosystem.

The second way to respond to this question is to look at the Forest Plan language. The Forest Plan pages 206-75 states, "The risk of and potential for destructive crown fire is reduced, especially in the Urban/Rural Influence Zone (U/RIZ) and the Wildland Urban Interface (1U) as depicted on the Fire Management Analysis Zones map." Maps that accompany this text include a map of the U/RIZ and a map of the Fire Management Analysis Zone 1U (FMAZ 1U). The FMAZ area lies further southwest of Flagstaff than the ½ mile U/RIZ area. The Fire Risk Reduction emphasis treatments in the Woody Ridge project fall within the FMAZ 1U. Therefore, the Fire Risk Reduction emphasis treatments are in compliance with the Forest Plan.

Chapter 2 of the EA describes the need for fire risk reduction emphasis in between Woody Ridge and communities. "These areas were also chosen for a fire risk reduction emphasis, because Woody Ridge itself, located further south, provides important habitat for northern goshawk, Mexican spotted owl, turkey and bear. Maintaining a more dense forest condition on Woody Ridge, increases the importance of providing low wildfire hazard potential between Woody Ridge and the communities. Another factor considered was the presence of numerous roads, trails, and dispersed camping within these areas. Higher recreation use levels occur along the Hwy 89A corridor and adjacent communities." This risk of ignition is higher along the 89A corridor and therefore a fire risk reduction emphasis is appropriate adjacent to the highway.

Temporary Roads: The Draft Environmental Assessment does not disclose the location of new or reconstructed temporary roads needed to implement commercial thinning in the Woody Ridge Forest Restoration Project. Page 31 indicates that 8-10 miles of temporary road will be required to implement alternatives A and C. We encourage the Forest Service to construct a minimum amount of new or reconstructed temporary roads. In Grand Canyon Trust's comments on the proposed action, we raised concerns about the construction of temporary roads in Mexican spotted owl habitat. Specifically, we stated that additional section 7 ESA consultation may be necessary as the Fish and Wildlife Service's Batch Wildland Urban Interface Biological Opinion did not include the effects of this action. The Forest Service response to comments received to the Proposed Action (# 6.18) states "There may be a need for 2-3 miles of temporary road within MSO restricted habitat…". Therefore, we assume that the Forest Service will meet its legal requirement and reinitiate consultation on the Woody Ridge Forest Restoration Project.

The location of temporary roads within MSO restricted habitat has been determined and field verified. A map of these locations is part of the biological assessment and evaluation, which has been submitted to the US Fish and Wildlife Service for consultation. Other temporary road locations are generally known, but exact locations will depend on the specific needs at the time of implementation. Temporary roads will only be used as needed.

Protection of 'Yellow-barked' Pine Trees and Oak: We are concerned with two of the proposed mitigation measures outlined in the Draft Environmental Assessment. On page 33, it states "Old 'yellow-barked' pine trees will have duff raked away from the bases where high litter depth

(greater than 12 inches deep) may result in girdling and mortality." The same mitigation measure is outlined for protection of oak. We believe these are not adequate mitigation measures to prevent damage and death to large pine trees and Gambel oak. We strongly suggest that the first of these mitigation measures is changed to reflect that all 'yellow-barked' pine trees will have all duff raked away from the bases regardless of litter depth. There is ample justification for this in the literature. The base of oak trees may also need to be raked if pine needles have accumulated at all as oaks are very sensitive to fire damage. All large oak trees should be protected from fire. If the Forest Service plans to implement these mitigation measures as outlined in the Draft Environmental Assessment, a full disclosure of the effects to these ecologically important trees must be added and prescriptions should be written to take into account the loss of many trees to prescribed fire.

We have not found sufficient justification for raking duff away from the boles of ALL yellow-barked pine trees and oak trees. Several studies have observed that heavy duff accumulations around the base of old growth trees increase mortality as an effect of both wild and prescribed fire. And that mature tree mortality is greater after a wildfire. Some of these studies have suggested that removing heavy duff accumulations from the boles of old growth trees may reduce the observed mortality. However, no studies were found to define the depth of accumulation at which increased mortality occurs, or to determine the percentage increase in survival.

There are many other factors that influence the probability of mortality resulting from fire occurrence. The other components of the entire fuel matrix surrounding a tree influence this probability. Soil composition, depth, and moisture influence this probability. Degree of slope, the position of the tree on the slope, and the aspect influence this probability. Shading, as well as, air temperature, relative humidity, wind speed, direction, and degree of drought influence the probability of mortality. The time of year the fire occurs influences this probability. Individual tree vigor also plays a significant role. Duff depth in most of the project area is less than 2 inches, even in previously untreated. Based on current research it is not possible to determine the effects of raking versus not raking duff layers away from the boles of trees, or at which depth of accumulation, duff removal should occur.

Research does not suggest that raking is the only measure reducing burn damage to large pine and oaks. Using a modified selection system and periodic burning can be used to maintain remnant old growth stands and to create future old growth (Fiedler 1996, Fiedler and Cully1995). The EA states that burning techniques will also be used to minimize fire effects to the feeder roots and cambiums of mature trees. For example, two or even three successive prescribed burns starting with damp fuels can be used to incrementally reduce duff and woody fuel accumulations. Trees are less susceptible to fire damage when entering dormancy in late summer and fall. Seventy percent of the district's prescribed burning is conducted in the late summer and fall. Blocks burned in the spring and summer months are selected to minimize the negative fire effects that may occur during those seasons. Additional burn block preparation is performed when the seasonal influence may increase mortality of mature trees.

If vigor of desired leave trees is poor, it may be wise to thin mechanically and allow the leave trees to recover or release somewhat before applying fire, in perhaps 2 years (Fiedler and others

1996). The soonest areas are prescribe burned after thinning on the Peaks R.D. is 18 months. While most prescribe burning does not occur until 25 months or more after thinning.

Burn plans will mitigate large oak loss by moving large material on the ground from around the base of trees and avoidance of slash piles near oaks. While wildfires occurring at the height of fire season can carry through and consume oak litter, during prescribed fire conditions oak litter resists burning and protects large oak trees. Microhabitat monitoring occurs in areas with oak, and with this monitoring there is an opportunity to influence implementation techniques if monitoring shows mortality greater than anticipated.

The 12-inch depth was chosen as a balance between protection and feasibility (lining is very time and labor intensive). It has been calculated that lining every Ponderosa pine over 16"dbh and every oak over 10"drc would add $260,000 to the cost of prescribe burning this project without a way of measuring the benefit. With the demand for federal funds and the amount of other acres needing hazard reduction, increasing the cost of per acre treatment means fewer acres receive hazard reduction treatment. This increases the probability that more yellow-barked ponderosa and mature oaks will be lost to wildfire.

As an area is prepared for prescribed burning, a form of triage must be performed. First to determine if the large tree is at risk from heavy duff accumulation and second if removing the accumulation is likely to save the tree considering the other site characteristics mentioned above. Raking away duff will be used selectively along with a variety of other burning techniques to minimize fire effects to large Ponderosa pine and oak trees. This approach has been used on district prescribed burns since the Ft. Valley Restoration project. This approach is likely to result in the least mortality of mature trees while maintaining current treatment costs.

Dry Lake Trail: We are pleased to see that the Draft Environmental Assessment proposed action for the trail at Dry Lake addresses many of Grand Canyon Trust's concerns related to the new trail location and the closure of social trails. However, we continue to have several concerns:

a) The Draft Environmental Assessment does not address the cumulative issues of access and trail design at the Dry Lake caldera. Portions of a trail built by the Arboretum access the caldera within the MSO PAC, an area where human access should be extremely limited or non-existent during the breeding season. The existence of this social trail, combined with the uncertainty surrounding the future management of State Land in section 26 (e.g. Coconino County Parks and Open Space land purchases, Centennial Forest, and State Land Reform efforts currently underway), and the still pending easement required to provide access through section 26, leads Grand Canyon Trust to strongly suggest that the Dry Lake access issue should be thoroughly considered in a separate NEPA process. There are a multitude of unknowns in this area, combined with important ecological concerns (MSO, noxious weeds, nesting raptors, controlled access, etc.). This sensitive area deserves a comprehensive analysis and proposed action that addresses these concerns while providing for appropriate public access. The most appropriate way to deal with these concerns and the present unresolved issues of the Arboretum trail and the future management of section 26 is to address these issues separately from the Woody Ridge Forest Restoration Project.

The Dry Lake trail and social trail obliteration as described in the Woody Ridge EA is only one aspect of management of the caldera. The EA recognizes there are unanswered questions related to use from the Arboretum and on State section 26. However, because connecting social trails will be obliterated, the Dry Lake Trail will not connect to social trails in Section 26. The Dry Lake Trail is also distant from the Arboretum lands. Continued discussions about this area are needed. The Forest Service will not likely initiate a separate analysis for additional actions until other agencies or organizations take the lead in facilitating additional discussions.

b) The Draft Environmental Assessment indicates that social trails will be obliterated and naturalized where intersecting with newly constructed trails (page 31). As discussed during the multi-agency field visit to Dry Lake on October 2, 2003, there was general agreement that the entirety of the social trails must be obliterated, not only where they intersect with the new trail. This is of particular concern as most of the social trails (and a fire line) are within the Mexican spotted owl PAC and core area. We encourage the Forest Service to complete the trail obliteration prior to new trail construction; this should not prove to be controversial as there is not evidence of high use of the social trails.

Page 36 of the EA under the Dry Lake Caldera heading, says to "Naturalize social trails and fireline that follow the caldera rim on the southwest, south and east sides will be obliterated. Social trail obliteration will focus on the entrance points first, and then the entire length of the trails." The ID team estimated 2-3 miles of social trail obliteration will occur, and the locations have been mapped and presented to US Fish and Wildlife Service for consultation.

On the other trails, only intersecting sections of social trails will be obliterated as described on page 31, but the social trails on the Dry Lake Caldera rim will be obliterated entirely.

c) During the October 2003 field visit, there was general agreement that invasive weed mitigation would take place along the trail corridor prior to construction. We believe this mitigation measure should be clearly outlined in the Environmental Assessment. If funding for invasive weed control efforts is not available prior to trail construction, the new trail should not be constructed until such funding has been obtained. This is an important means to assist in the prevention of further infestation of this ecologically important area.

On page 35 under the Dry Lake Caldera heading it states "The trail tread accommodates foot travel with an area up to 6-8 feet where invasive weeds and other vegetation will be cut back as a normal part of trail construction."

As always, thank you for your time and consideration. Please contact us if you would like to discuss any aspect of these comments in greater detail.

Sincerely,

/s/ /s/

Michele James Taylor McKinnon

 Grand Canyon Trust

6845 Pintail Dr.
Flagstaff, AZ 86004
Feb 17, 2004

Gene Waldrip
Peaks District Ranger
5075 N. Hwy 89
Flagstaff, AZ 86004

Dear Sir,

With respect to the Environmental Assessment for the Woody Ridge Forest Restoration Project, please accept the following comments.

During the Scoping phase of this project I wrote in part;

"There is a great need to expand the scoping that has been done with respect to road management, motorized recreation and access issues. The first restoration project undertaken in concert with the Greater Flagstaff Forest Partnership, Fort Valley, was quite controversial due to its initial proposal to severely restrict motorized access. This was resolved by holding a series of sessions that involved local recreational interests, but it slowed the project and created an initial sense of mistrust among some people. Some of us thought we had commitments to involve users at an earlier stage in future projects. I have attached a letter from John Gerritsma, the Grand Canyon Forests Partnership Liason at the time. It discusses one idea that came out of that project – to place placards onsite to notify users of an area well in advance of any studies about road or area closures. Current Recreation Planners at the District also have expressed an interest in such notification. The rationale for this is to let people who don't frequently use an area know that it is being studied and provide an opportunity to have input to the process. This is especially useful to people who do not reside near the area being studied (in this case Woody Ridge).

This comment was also received during scoping. This project was listed on the Schedule of Proposed Actions with specific words that road changes may occur. The news release for the open house listed roads and trails as a part of the proposal. A Proposed Action document was mailed to agencies and organizations known to have an interest in the area, and to adjacent landowners. The Proposed Action document described road management proposals. This level of scoping is adequate to identify issues for the NEPA process and follows standard scoping practices.

Placards have been tried in other project locations with very little response (personal conversation Paul Standing and John Nelson).

It is important to note that within the project area, there is more Arizona State Trust land than National Forest land. In fact, only 41% of the land in the area is on the Coconino National Forest. This is important because road closures done on FS land can block access to State Trust land. It is my understanding that the FS and the State have agreements to work together to provide access to land under each other's control.

Desired conditions and possible management scenarios were discussed for the Woody area, with State Land Department representatives who participated along with other members of the GFFP. One part of the PA to move the gate on Woody Mtn road down to the intersection of FR231 on State land has been adjusted so that the gate will stay in its current location.

The State Land Department has raised no concerns in response to the Proposed Action or to the Environmental Assessment.

Some history concerning motorized recreation in the Woody Ridge area is in order to provide perspective about the need to include input from communities representing motorized recreation interests.

In about 1992 I first ran into locked gates on some roads while hunting in the Woody Ridge area. Gates closed road 75, which was a main road in the area. Another road into Black Pass tank was closed by locked gates. I went to the District office to inquire about the reason for the closure. Tammy Randall-Parker told me that it was to prevent theft of oak while the LeBarron timber sale was going on and to allow the timber harvest to proceed including the reconstruction of haul roads. I was told it would only be for a couple years. The locked gates stayed year after year. In 1996 there was a proposal from Ms Randall-Parker to designate the AREA for closure. That proposal was never implemented even though the signs in the area continued to lead people to believe that the whole area around Woody Ridge was closed to motor vehicles. It has been commonly known as a "Quiet Area" since 1992 despite the fact that no such area was ever designated. No public input was ever solicited. None was ever taken."

Unfortunately, it appears that little real effort was expended in this area. No alternatives were developed that deal with the motorized access issues in this area. This leaves us with at least two major issues with Alternatives A and C.

As written, they both say "Over time, all non-system roads in the area will be obliterated" (p 24). No analysis of the desirability of any of these roads is included in the EA. In fact, page 12 says "The desired condition is fewer miles in keeping with the FS ability to maintain, Forest Plan recreation setting objectives and Forest Plan criteria for roads". Let's analyze that. First, these roads are precisely the ones 4-wheelers like myself want – those that ARE NOT maintained by the Forest Service. They do not require FS budget for maintenance. In fact, obliteration is a drain on the budget. Additionally, many of these are in areas NOW categorized in ROS as Roaded Natural or Semiprimitive Motorized which are fully compatible with such roads (more on this later). Page 22 and page 102 state "Motorized trail planning is outside the scope of the Woody Ridge RFP… Unrelated to this project, a forest-wide motorized trail effort begins in 2004. This effort will better address the need for motorized recreational experiences on a landscape scale basis". In addition, the Five Forest OHV EIS is in progress and was advertised as the process by which such non-system roads will be evaluated on a local level. Even the new proposed Coconino Forest Plan Amendment that accompanied the DEIS for OHV direction says "Work with representatives of the spectrum of motorized users (including 2, 3, and 4 wheeled vehicles) in developing, designating, and providing information on off-road driving opportunities". It further states "Opportunities for recreational off-road driving will be

considered in the road closure process. For example, existing roads which have eroded to a rock surface and are not likely to continue to erode may be left open and managed as motorized trails to provide a challenging driving experience when determined through an environmental analysis…They are not included when calculating the average road density per mile, but should be considered when evaluating wildlife habitat." So far, it does not appear that the Woody Ridge Restoration Project has provided an opportunity for such discussion. With this in mind, I believe the reference to obliteration of non-system roads should be deleted from this EA and left for future evaluations of the need for such roads for recreation.

It is correct that as roads are scheduled for obliteration they may be evaluated for use as a motorized trail route. The EA page 24 paragraph 3 will be changed as follows,

> Approximately 5 miles of National Forest system road will be obliterated over time[1]. . User-created roads, old temporary roads or other two-tracks are not necessary to the open road system[3]. These types of roads are usually scheduled for obliteration, but may serve as routes for motorized trail travel under separate future NEPA analysis. Reference the Final Environmental Impact Statement for Cross Country Use of Motorized Vehicles in Five National Forests when it becomes available.
>
> Road obliteration will include ripping, seeding, re-contouring in some situations, placing rocks, boulders, and slash on the obliteration to achieve the desired condition of not having vehicles drive the roads in the future.

A second major issue raised in Alternatives A and C is the paragraph on page 23 that says "A portion of the project area does not have ROS objectives because it fell outside the Flagstaff/Lake Mary Ecosystem Analysis area. Alternative A will set objectives for these acres as shown on the map". This statement is <u>false</u>. There <u>are</u> ROS objectives in place now for the sections in question (in the South part of the analysis area). They are currently either Roaded Natural or Semiprimitive Motorized. This EA would change the ROS settings to Semiprimitive <u>non</u>motorized and additionally, use the NEW objectives as rationale for closing roads (p 39). This leaves motorized recreation users trapped in a "Catch 22". The ROS objective is proposed to be changed because we want fewer roads, and we want fewer roads because the new ROS objective calls for fewer roads. Just as the FLEA process was used as rationale to close roads in newly created Semiprimitive nonmotorized settings, these newly designated Semiprimitive nonmotorized sections would be said to preclude non-system roads.

The Proposed Action published last summer made no mention of changing ROS setting objectives. Those of us that submitted comments during the scoping process were given no opportunity to raise issues prior to the publication of this EA, this despite the fact that my comments submitted at that time specifically referred to the problems arising from existing ROS objectives in the area. This change evidently came very late in the development of the EA without any public involvement. It is clear that the process of preparation of this EA did not follow the Forest Service publication "ROS Users Guide" when considering the changes evident in the EA. In addition, the proposed new ROS objectives do not fit the existing conditions in a number of areas, including remoteness, size, and evidence of human interaction.

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[1] Road obliteration may occur after thinning treatments are complete and as a part of the thinning work.
[2] Non-system roads are usually user-created or 'social' roads.
[3] As identified on the EA map and the spreadsheet located in the Roads Analysis Report (PRD#128).

These changes to ROS objectives do not belong in this EA. Any changes to existing ROS objectives should only be considered as part of a process envisioned in the ROS Users Guide and subject to full and open public participation.

The only places where Recreation Opportunity Spectrum Settings (ROS) have been set as objectives is in lands surrounding Sedona (Amendment 12 to the Forest Plan) and lands surrounding Flagstaff (Amendment 17 to the Forest Plan). In these amendments ROS settings are drawn on maps and set as objectives i.e. something to strive towards.

The remainder of the Forest has been inventoried for recreation settings. There is a 1992 map that shows the results of this inventory. The purpose of the map is to show land managers what is there now, but there is no direction to progress towards the settings as shown on the inventory.

The interdisciplinary team developed a desired open road system considering access, recreation and resource needs. When this road system was reviewed along with the 1992 inventory for ROS, additional objectives were proposed (by Jim Beard, Landscape Architect and Debbie Kill, Planner). This process took place during analysis and after the proposed action document was released. The ID team reviewed the draft of the EA prior to its release and concurred with the new objectives proposed.

ROS objectives are used as a guide for management of roads, trails, special uses and outfitter guides. The amount of developed recreation facilities and signing are also influenced by ROS objectives.

It should be remembered that this whole area is a very mixed ownership pattern. In fact, the Forest Service holds only a minority stake in the area. ROS objectives and motorized trails should consider the need for the public to access many sections of State land. Unilateral decisions by the Forest Service should not adversely affect the public's enjoyment of the whole area.

I'd like to see more involved discussion with motorized recreation users of this area. These discussions should result in a limited number of well-selected opportunities for challenging 4x4 access to the area for recreation. The ROS designations should not be changed prior to such discussions.

On a completely different aspect of the proposed action, I support cutting trees as necessary to enhance the restoration objectives (as in Alternative A). There should not be any arbitrary caps set (such as 16 inches) just to please those who are afraid that some logger might be able to make a dollar by selling some product. The goal should be to accomplish the restoration in a cost-effective manner. Trees are a renewable resource (gee, the FS is in the Agriculture dept – probably for a reason) and should again be viewed as such. In my areas (east of Flagstaff) it is many of the large, "old growth" trees that are dying due to their susceptibility to the current drought induced, bark beetle infestation. Governor Napolitano just made a point to the Undersecretary of Agriculture that these projects around Flagstaff were progressing too slowly due to lack of bids and that a cost to the government of $550 should be born by the Federal

government (ironic when part of the rationale is that it is a burden to the budget!). This plea comes from a Governor that generally supports the groups most vocal about caps. Please do not set any politically motivated caps on size that make these projects uneconomical for bidders. Any caps should be set strictly based on forest health.

It is noted that this comment does not agree with the use of arbitrary diameter caps. In the case of the Woody Ridge project, the EA describes it is unlikely that trees greater than 16 inches will offset the cost of implementing the project.

Lastly, I have a minor (I hope) point. In a verbal comment to Debbie Kill on Feb 12, I pointed out that the APS powerline road was not shown as an open road on the map even though it is specifically stated to remain open (p 24, etc). I was told that this was just a mapping problem and in fact it is to remain open. I would like the map to be changed to reflect the verbiage.

The map will be adjusted to show the powerline corridor.

Thank you for the opportunity to comment on this EA.

Sincerely,

Bruce H. Johnson

Mr. Gene Waldrip
District Ranger, US Forest Service
Peaks Ranger District, Coconino National Forest
5075 N. Highway 89
Flagstaff, AZ 86004

February 17, 2004

Re: Woody Ridge Forest Restoration Project Draft Environmental Assessment

Dear Gene:

The Greater Flagstaff Forests Partnership (GFFP) Project Team reviewed the Draft Woody Ridge Forest Restoration Project Environmental Assessment (Draft EA) and forwarded their recommendations to the Partnership Advisory Board (PAB) in a memorandum dated February 9, 2004. At their meeting of February 10, the PAB reviewed and modified the language of the PT memorandum and forwarded proposed language on recommendations on the Draft EA to the GFFP Board of Directors. Based on the 2/12 PAB memorandum, the GFFP, Inc. Board submits the following comments to the FS for their consideration.

Overall, we find that the Draft EA has been greatly improved from the Proposed Alternative released in May of 2003. We also commend the FS on the development and full analysis of multiple action alternatives in this final Draft EA. Specific comments include:

1. A major concern is the lack of a defined monitoring program with the EA to determine if the treatments will achieve the desired results. The Forest Plan indicates what should be monitored, while individual NEPA activities should define how it is done and where. With the Woody Ridge EA the only effects monitoring appears to be associated with the MSO & PACS (page 37). Without a more defined monitoring effort, how will the treatments be monitored to determine if the desired results are being achieved? This became an issue regarding monitoring deficiencies in the Ft. Valley and Kachina Village projects. We suggest the FS design and incorporate additional monitoring programs in the final EA, including but not limited to effects on reduction of crown fire spread in community protection fuels reduction units, and on the response of key ecological parameters (ground cover & fine fuels enhancement, wildlife habitat conditions, etc.) in forest restoration units.

   The monitoring ideas listed in this comment are not necessary to determine significance under NEPA. However, it is recognized that monitoring would be valuable and helpful on any of the projects mentioned as well as the Woody Ridge project. Monitoring can be initiated after a decision is made and at any time in the implementation process. It is not necessary to list monitoring in the EA prior to making a decision for the Woody project

area. There is no specific monitoring question suggested here. See the comment response above in the Southwest Forest Alliance letter.

2. Terminology continues to be an issue. Terms and phrases such as *uneven-aged management, site density index, and public's perception of safety & well being* should be explained in further detail, perhaps through the inclusion of a glossary.

   Many of the terms used in the EA are explained via footnotes. Some forestry management principles are complex, and a full description would take many pages. In future documents, we will continue to strive to explain terms more clearly.

3. On page 33, there is a discussion of raking duff around old 'yellow barked' pine trees where "high litter depth layers (greater than 12 inches deep) may result in girdling and mortality". What is the source of this "greater than 12" litter depth? When ignited and smoldering, litter depths less than 12" may be a problem. Perhaps any mature tree with significant litter accumulated at the base should be raked and protected. Otherwise, additional effects analysis might be required to acknowledge that significant mortality will occur on mature trees with significant litter accumulations during prescribed burning fuels treatments.

We have not found sufficient justification for raking duff away from the boles of ALL yellow-barked pine trees and oak trees. Several studies have observed that heavy duff accumulations around the base of old growth trees increase mortality as an effect of both wild and prescribed fire. And that mature tree mortality is greater after a wildfire. Some of these studies have suggested that removing heavy duff accumulations from the boles of old growth trees may reduce the observed mortality. However, no studies were found to define the depth of accumulation at which increased mortality occurs, or to determine the percentage increase in survival.

There are many other factors that influence the probability of mortality resulting from fire occurrence. The other components of the entire fuel matrix surrounding a tree influence this probability. Soil composition, depth, and moisture influence this probability. Degree of slope, the position of the tree on the slope, and the aspect influence this probability. Shading, as well as, air temperature, relative humidity, wind speed, direction, and degree of drought influence the probability of mortality. The time of year the fire occurs influences this probability. Individual tree vigor also plays a significant role. Duff depth in most of the project area is less than 2 inches, even in previously untreated. Based on current research it is not possible to determine the effects of raking versus not raking duff layers away from the boles of trees, or at which depth of accumulation, duff removal should occur.

Research does not suggest that raking is the only measure reducing burn damage to large pine and oaks. Using a modified selection system and periodic burning can be used to maintain remnant old growth stands and to create future old growth (Fiedler 1996, Fiedler and Cully1995). The EA states that burning techniques will also be used to minimize fire effects to the feeder roots and cambiums of mature trees. For example, two or even three successive prescribed burns starting with damp fuels can be used to incrementally reduce duff and woody

fuel accumulations. Trees are less susceptible to fire damage when entering dormancy in late summer and fall. Seventy percent of the district's prescribed burning is conducted in the late summer and fall. Blocks burned in the spring and summer months are selected to minimize the negative fire effects that may occur during those seasons. Additional burn block preparation is performed when the seasonal influence may increase mortality of mature trees.

If vigor of desired leave trees is poor, it may be wise to thin mechanically and allow the leave trees to recover or release somewhat before applying fire, in perhaps 2 years (Fiedler and others 1996). The soonest areas are prescribe burned after thinning on the Peaks R.D. is 18 months. While most prescribe burning does not occur until 25 months or more after thinning.

Burn plans will mitigate large oak loss by moving large material on the ground from around the base of trees and avoidance of slash piles near oaks. While wildfires occurring at the height of fire season can carry through and consume oak litter, during prescribed fire conditions oak litter resists burning and protects large oak trees. Microhabitat monitoring occurs in areas with oak, and with this monitoring there is an opportunity to influence implementation techniques if monitoring shows mortality greater than anticipated.

The 12-inch depth was chosen as a balance between protection and feasibility (lining is very time and labor intensive). It has been calculated that lining every Ponderosa pine over 16"dbh and every oak over 10"drc would add $260,000 to the cost of prescribe burning this project without a way of measuring the benefit. With the demand for federal funds and the amount of other acres needing hazard reduction, increasing the cost of per acre treatment means fewer acres receive hazard reduction treatment. This increases the probability that more yellow-barked ponderosa and mature oaks will be lost to wildfire.

4. There needs to be clarification of the location and extent of temporary roads and roads to be obliterated. What portion of the 8-10 miles of needed temporary roads (page 31) are existing roads to be obliterated? Are any new roads in restricted habitat?

   The 8-10 miles of temporary roads are a combination of old roadbeds that were previous roads or two tracks (social roads), and new construction. System roads scheduled for obliteration are not part of the miles estimated.

   The location of temporary roads within MSO restricted habitat has been determined and field verified. A map of these locations is part of the biological assessment and evaluation, which has been submitted to the US Fish and Wildlife Service for consultation. Other temporary road locations are generally known, but exact locations will depend on the specific needs at the time of implementation. Temporary roads will only be used as needed.

   The exact location of temporary roads may vary at the time of implementation, based on the kind of equipment used. Temporary roads will only be used as needed.

5. The trail system at Dry Lake Caldera has undergone considerable scrutiny, yet the analysis in the EA is confusing. Analysis of the east side trials is thorough, but proposals regarding the west side social trails associated with access from the Arboretum are incomplete and contradictory based on agency agreements regarding obliterations and restricted habitat. Perhaps unauthorized social trails should be obliterated for this EA and a complete trail and access study done in a separate EA / CE process. This is especially true when the status of easement applications for contiguous State Lands is unclear and appropriate access rights may not yet be secured.

   The Dry Lake trail and social trail obliteration as described in the Woody Ridge EA is only one aspect of management of the caldera. The EA recognizes there are unanswered questions related to use from the Arboretum and on State section 26. However, because connecting social trails will be obliterated, the Dry Lake Trail will not connect to social trails in Section 26. The Dry Lake Trail is also distant from the Arboretum lands. Continued discussions about this area are needed. The Forest Service will not likely initiate a separate analysis for additional actions until other agencies or organizations take the lead in facilitating additional discussions.

6. On page 14 in the middle of the 3rd paragraph, it is stated that the ID Team did not consider a suggested alternative because "analysis has shown that protecting structures requires fire hazard reduction in an area greater than ½ mile, especially southwest of communities". We believe the intent here should be "protecting communities" rather than "structures". The work of Jack Cohen of the Forest Service clearly shows that actions right around the structure are critically important for structure protection. Community protection requires more extensive (wider) treatments, but a community is an aggregation of structures that each must include their own fire wise protections and defensible space to survive fire. The EA should be clear what the goal is – community or structure protection – and be consistent throughout the document as to what the best available analysis indicates is required to achieve desired conditions to protect each one.

   It was the intent of this paragraph to use the word communities rather than structures. The EA will be corrected on page 14, paragraph 3.

7. In a related issue, there is some justification in the EA related to implementation of community protection fuels reduction treatments more than ½ mile from urban areas, such as the intensive treatments along 89A related to increased wildfire risk from high recreation use. However, it appears that these treatments are proposed for numerous areas well removed from communities and where forest restoration treatments might

be more appropriate. How was the boundary location between emphasis on community protection and emphasis on forest restoration treatments established if it was not the ½ mile "Urban Rural Influence Zone" described in the Coconino NF LRMP and discussed in the FLEA decision? Where intensive treatments are proposed beyond this ½ mile zone, additional justification and clarification may be appropriate.

Stands with a fire risk reduction emphasis were chosen for the following reasons,

1) As stated on page 7 of the EA, "These areas were also chosen for a fire risk reduction emphasis, because Woody Ridge itself, located further south, provides important habitat for northern goshawk, Mexican spotted owl, turkey and bear. Maintaining a more dense forest condition on Woody Ridge, increases the importance of providing low wildfire hazard potential between Woody Ridge and the communities. Another factor considered was the presence of numerous roads, trails, and dispersed camping within these areas. Higher recreation use levels occur along the Hwy 89A corridor and adjacent communities." This risk of ignition is higher along the 89A corridor and therefore a fire risk reduction emphasis is appropriate adjacent to the highway.

2) The Forest Plan pages 206-75 states, "The risk of and potential for destructive crown fire is reduced, especially in the Urban/Rural Influence Zone (U/RIZ) and the Wildland Urban Interface (1U) as depicted on the Fire Management Analysis Zones map." Maps that accompany this text include a map of the U/RIZ and a map of the Fire Management Analysis Zone 1U (FMAZ 1U). The FMAZ area lies further southwest of Flagstaff than the ½ mile U/RIZ area. The Fire Risk Reduction emphasis treatments in the Woody Ridge project fall within the FMAZ 1U.

This larger area (FMAZ 1U) has long been considered an important area for suppressing and preventing catastrophic forest fires. It was developed in the past by fire management personnel.

The U/RIZ as described in Amendment 17 is not just related to fire management. The zone characterizes the part of the Forest most influenced by adjacent neighborhoods, with unique management needs for trails, outfitter guides, special uses, land exchange and roads.

On page 53 it is stated that only on 1,567 acres of 8,597 total acres treated will effects be different between Alternative A, the preferred alternative, and Alternative C, the 16" dbh cap alternative. What this indicates is that on approximately 82% of the treated area, the presence or absence of a 16" dbh cap does not affect achieving DFC's. We noted the discussion on pages 109-110 regarding public perceptions and are aware of the fact that Alternative C was carried to full analysis late in the EA process, partially due to concerns over public perceptions of removing significant numbers of large trees. Because

removal of large trees is such a significant public issue and since the presence of a cap does not have significant affects on achieving DFC's on 82% of the treated area, we believe the FS should consider combining Alternatives A and C to apply a 16" dbh cap on the 7,030 acres where it will have little or no effect on achieving restoration goals and have no cap on the 1,567 acres where DFC's can not be achieved with a cap in place. This would go a long way to easing public concerns regarding removal of large trees.

In this comment, the rationale for implementing a cap on 82% of the project area is to ease public concern. However, only 18 letters and e-mails were received in response to the proposed action for the Woody Ridge project which was published in May of 2003. Of these, only one letter suggested a 16-inch cap. A news brief was published in the Arizona Daily Sun prior to an open house held on May 17th, 2003. At this open house approximately 25 people attended and there was little discussion of a 16-inch cap at that time. The Peaks District Ranger received e-mails related to the 16-inch cap, only from the one organization that originally commented on this topic during scoping. Other than this one group, the Peaks District Ranger has received no phone calls, e-mails or office visits from people expressing concern over large trees. There have been few if any newspaper or magazine articles written about the Woody project. In the Governor's recent news release and visit to Flagstaff, diameter caps and large trees were not mentioned. During the formal comment period 5 letters and e-mails were received. Of the 5 letters, 3 supported a 16-inch cap. These 3 letter represent organizations with constituents (Grand Canyon Trust, Southwest Forest Alliance, Greater Flagstaff Forest Partnership). Other than the GFFP, it is not known whether members were polled related to a 16-inch cap on the Woody project area.

The conclusion drawn from public participation, media activity and communication with the District Ranger do not support the claim that selecting Alternative A will be highly controversial. After analyzing Alternative C in detail, there is no information to support implementing a cap. To implement a cap because it 'doesn't make a difference' is illogical without a supporting reason to take the action in the first place.

This letter represents the views of the members of the Greater Flagstaff Forests Partnership, but does not necessarily reflect the views or agency missions of each member.

Additional arguments, for a 16-inch cap, that came from the original letter during scoping are as follows.

Large ponderosa pine trees are rare.
In the Woody project area large old yellow-bark ponderosa pine are rare. Large blackjack ponderosa pines are not rare.

They are also highly fire resistant and, when compared to smaller trees, less susceptible to initiating crown fire because they typically have higher crown base heights.
This is true for the Woody area for many large blackjack and large yellowpine trees.

Cutting large trees in favor of small trees will increase overall fire hazard in the Woody Project area.

There are some stands where uneven age management is applied, where large blackjack trees may be cut in favor of small trees. This is so that a greater amount of diversity will occur within the stand. Some groups of younger smaller trees are retained to provide a variety of age classes over time within the stand. This type of management is proposed along Woody Ridge where the desired condition includes moderate fire potential. The areas between the base of Woody Ridge and communities has a desired condition of low fire potential and the greatest emphasis on fire risk reduction. Even age thin from below management will result in most a similar or higher VSS size after thinning. For example many of the VSS3 stands will progress towards VSS4 thus achieving the lower fire hazard described in this comment.

Large trees are exceptionally valuable to wildlife including management indicator species such as MSO, northern goshawk, and Abert squirrel. Cutting large trees may needlessly degrade habitat for [species lists above] and migratory songbirds.

Large old yellow bark pines are exceptionally valuable to wildlife. Large blackjack ponderosa pine is less valuable to wildlife. The objectives for treatment in stands along Woody Ridge are to enhance habitat for MSO, northern goshawk, turkey, and Abert squirrel. Part of enhancing this habitat includes growing more large trees where there are redundant large blackjacks currently.

Contrary to the FS's hasty generalization in the past, diameter caps do not impede efforts to create forest openings, as evidenced by abundantly large forest openings through the Fort Valley Ecosystem Restoration Project (16inch cap) and the A1 Project (18inch cap) near Flagstaff.

The size and amount of forest openings described in the desired condition for the Woody FRP is greater than those described for the Fort Valley and A1 Project. The Fort Valley did not have an objective for a certain size or amount of openings rather the Fort Valley work followed presettlement evidences, a scenario very different from the desired condition described for Woody. As described above, there are some stands where openings can be achieved and 16+inch trees would not need to be cut. There are other stands where openings would not be achieved if a cap existed. On Woody we can emphasize the swales, low spots along drainages that would promote the best grasses and understory plants.

We are further concerned that cutting large trees will compromise the development of old growth forests. Cutting large trees will not "create or sustain as much old-growth as possible over time at multiple-area scales," as required by the Forest Plan because doing so would remove the trees that meet or will most soon meet the 18 inch old growth qualification.

In a stand of large black-jack trees where growth is impeded by competition, it is unlikely that any of the trees will reach the 18 inch old growth diameter qualification, and/or reach any other old-growth characteristics described in the Forest Plan or if they do it will be very slow.

This is particularly true in the short term, when drought and fire induced old growth mortality will magnify already alarming old growth deficits at multiple area scales.

The current deficit in old-growth and large (18inch plus) trees is a reason why 16+inch trees should be considered for removal. The drought and fire induced mortality adds to that reason. Now more then ever, it is important to progress towards larger trees that can develop old-growth characteristics. As mentioned above leaving dense stands of 16+inch blackjack trees will not do this. Thinning some large blackjacks and leaving others increases the ability of the leave trees to withstand drought, insect and disease. Thinning some large blackjack trees from around existing yellow bark pine may also improve vigor

of the yellow bark pine and decrease the potential for drought, insect and disease mortality.

We are concerned that cutting large trees will generate controversy that could lead to litigation that delays project implementation thus potentially compromising project objectives.

Appeal or litigation could occur on any project for any reason. Decisions can not be based on the potential for appeal or litigation.

In addition to the specific comments above, several other issues need to be addressed regarding moving forward with the Woody Ridge Forest Restoration Project.

First, although the GFFP is identified on pages 1-2 and the Partnerships role in developing the Desired Condition Report is mentioned on page 3, there is limited discussion of the extensive effort that the Partnership and it's members have dedicated to advancing the Woody Ridge Project. While a majority of our official involvement with the FS has occurred on "the left side of the triangle", we believe the collaborative nature of this project should be emphasized in the report and in cover letters and other transmittal materials describing this project to the local community. For example, on page 13 under Public Involvement, more detail could be provided on Partnership and community involvement. The FS should be actively promoting the collaborative nature of all projects initiated within in the 180,000 acre GFFP project area.

It was an oversight not to mention the GFFP in the cover letter for the EA. All other publications included mention of the GFFP including the news release, EA itself, and Proposed Action, and the PowerPoint presentation delivered at the Open House. In order to lessen the bulk of the EA itself, extensive discussions of collaborative efforts were not included. Community involvement was represented in the letters received to the proposed action and the open house. There was little other community interest in this project.

Second, because this is a collaborative effort with an MOU in place, the GFFP often agrees to assist with or takes shared responsibility for certain aspects of projects within our boundary. The GFFP and FS should work together to clearly define what the Partnership is responsible for in regards to the Woody Ridge

Project. For example, if we propose and you incorporate additional monitoring, is GFFP responsible for securing additional resources to assure that monitoring is completed? We do not want to get into another situation like the social trails issue in the Orion PAC at Ft. Valley where clear expectations of what GFFP was supposed to be providing apparently were not articulated and agreed upon.

A cast up of implementation needs will be created for the Woody project as part of program of work planning. All projects outlined in the EA are slated to be accomplished by FS funding. However, some projects may take a long time to implement and could occur more quickly with partnership assistance. In addition, volunteer or grant assistance could augment required FS work, an example is additional nonnative and invasive weed control efforts.

And finally, we should reiterate the point made in our June 20, 2003 letter on the Woody Ridge PA regarding tree removal from clumps of trees. Although this is really an implementation issue separate from the EA, we want to again emphasize that during marking clumpiness should be emphasized and enhanced, and during harvest operations care must be taken to minimize damage to leave trees in those groups. Inadequate attention to this issue could result in unnecessary mortality of leave trees to the degree that DFC's and anticipated VSS may not be achieved.

Mortality of leave trees as a result of damage is not expected to be a high concern on the Woody Ridge project area (e-mail from Jim Rolf silviculturist). The existing condition on many stands is more open than has occurred in other project areas. The uneven age treatments include selecting groups of trees for harvest and leaving other groups intact. As mentioned in this comment, standard procedures are used to minimize damage to leave trees. It is noted that this remains a concern for GFFP members.

The Board of Directors of the Greater Flagstaff Forests Partnership thanks you for this opportunity to comment on the Woody Ridge Forest Restoration Project and for cooperatively planning this project with the PAB as outlined in the Memorandum of Understanding. We value this relationship and the resulting collaborative process, and look forward to implementation of this project under conditions outlined in the final EA.

Sincerely,

Dr. Tom Kolb, President
Greater Flagstaff Forests Partnership, Inc.

Cc: Debra Larson, Partnership Advisory Board Chair

Forest Guardians and Wild Watershed
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Mr. Gene Waldrip, District Ranger
USDA Forest Service
Coconino National Forest
Peaks Ranger District
5075 N Hwy 89
Flagstaff, AZ 86004

Delivery via electronic mail to
dkill@fs.fed.us

Re: Woody Ridge Forest Restoration Project Environmental Assessment

Dear Mr. Waldrip:

Forest Guardians is a non-profit group with offices in Santa Fe, New Mexico. Forest Guardians' mission is to protect and restore the native biological diversity of forests, grasslands, deserts and rivers of the Southwest. A primary goal is to protect our public lands, including those of the Coconino National Forest. Forest Guardians has over 2000 individual and business members throughout the US. Many of Forest Guardians' business members, individual members and staff use and enjoy the Coconino National Forest for recreational, aesthetic and scientific activities. Wild Watershed is a volunteer not-for-profit citizen group that advocates watershed restoration and protection of aquatic ecosystems in the Southwest.

The following are comments by the Forest Guardians and Wild Watershed to the Woody Ridge Forest Restoration Project Environmental Assessment ("EA").

1. The EA relies on goshawk management guidelines that are in violation of NEPA.

On November 18, 2003 the 9th Circuit Court of Appeals struck down the Management Recommendations for the Northern Goshawk in the Southwestern United States ("MNRG") because he Final Environmental Impact Statement that amended the Forest Plans based on the MRNG violated the National Environmental Policy Act ("NEPA") requirement that agencies respond to responsible opposing views. 40 CFR Section 1502.9(b). see Center for Biological Diversity v. Forest Service, DC N0. CV-00-01711-RCB.

In particular the court found that the Forest Service failed to respond to expert opinion published research challenging the agency's conclusion that goshawks are habitat generalists that utilize a wide range of forest condition. The consensus of these experts which include both New Mexico and Arizona wildlife agencies, the US Fish and Wildlife Service, a published former Forest Service raptor biologist and seven other published studies, is that goshawks prefer higher canopy stands for flight and prey capture and more closed canopies for reduced competition and predation by open-forest raptors than those provided by the MRNG.

Despite this ruling, the EA continues to rely on the MRNG guidelines (EA P. 48). In particular, the openings in ponderosa pine forests will increase 16 fold, canopy cover in VSS 4 and 5 will be significantly reduced (EA, p. 86) and 20,000 trees 16 inch plus in diameter will be removed (EA, p. 53). The EA goes on to state that:

> All Forest Service projects use Forest plan direction for future VSS structural stages (MRNG guidelines) for northern goshawk habitat. Cumulatively, these projects and activities do not affect the reproduction or overall distribution of northern goshawks (EA, p. 121).

The courts' have resoundingly invalidated this unsupported conclusion, a fact not reflected anywhere in this analysis.

Therefore, any decision to implement project activities in goshawk habitat must wait until a scientifically credible plan has been prepared and reviewed that adequately protects goshawk habitat and ensures that a well-distributed and viable population will be maintained. Any decision that continues to rely on the MRNG guidelines would be illegal.

As you noted in your comment The Region is proceeding with a supplementary EIS for the 1996 Forest Plan Amendments for the Mexican spotted owl and the northern goshawk. In the interim we intend to proceed with the current direction in the Forest Plan. A literature review prepared by Dr. Richard Reynolds concerning the use of the current goshawk management guidelines has been considered in our effects analysis and added to the project record (PRD# 149)

The effects of the preferred alternative are analyzed at the project level (PRD#126 Wildlife Report).

2. Population surveys must be conducted for Abert squirrel.

The EA did not respond to our earlier suggestions to survey for Abert squirrels to assess population density and not log important source areas after they have been identified (see Dodd et al. 1998 in our June 6, 2003 scoping comments).

Instead the EA relies on a simplified Habitat Quality Index Model to estimate effects. However the utility of this approach is questionable because "the model does not discriminate between stands that are within or beyond the travel distances of Abert squirrels" (EA, p. 90). Therefore, we renew our request that population surveys be conducted.

As we also noted in our earlier comments, the regulations that implement the National Forest Management Act ("NFMA") requires quantitative population data be acquired and analyzed to determine population trends of Management Indicator Species ("MIS"). 36 CFR 219.26. Abert squirrel is a MIS species on the Coconino National Forest representing species found in early stage ponderosa pine forests such as those found in the project area (EA, p. 88). Abert squirrel is also important goshawk prey, especially in winter.

Based on the inadequate habitat model discussed above, the EA is tentative in forecasting project effects on the Abert squirrel, saying "…. The action alternative may not have a detectable effect on the population trend of the Abert squirrel on the Coconino National Forest (emphasis added) (EA, p. 90). NFMA does not permit such uncertainty in estimating population trends of surrogate species such as Abert squirrel. Clearly population data is required to establish a credible scientific foundation on which to make management decision. Failure to so is illegal.

The Woody EA does not just use the model to describe effect to Abert Squirrel. There is additional discussion about the location and juxtaposition of forage and nesting habitat in Chapter 3 of the EA. This discussion, along with the HQI model information, provides the decision maker with a comparison of the different alternatives and an estimation of effect that meets the needs of site-specific analysis. Significant effects are not expected for Abert Squirrel habitat.

Additional Comments:

1.) The EA mistakenly characterizes our Citizen's Alternative as thinning hazardous fuel within ½ mile of structures. It should be within ¼ mile of structures. Please correct in the final document.

The letter we received states that "The community protection zone extends approximately ½ mile from structures (Shulke and Nowicki 2002)" - page 3.

2) Please provide research results to document the statement "analysis has shown that protecting structures requires fire hazard reduction in the area greater than ½ mile especially in the southwest" (EA, p. 14).

The use of the word structures in this sentence was in error and the intent was to say communities. See Errata sheet.

3) We are opposed to spring broadcast burning because of its undesirable effects to vegetation and wildlife (BAE, p. 35). Please provide research results showing that spring burning has non-significant effects.

Evaluation by the interdisciplinary team did not show significant effects related to burning. Any burning will be accomplished only when conditions are suitable to achieving burning objectives.

4) It is inconsistent with Coconino Forest Plan and the Mexican Spotted Owl Recover Plan to permit logging in restricted owl habitat that creates single story stands and lower canopy cover below 40 percent (BAE, pp 48-49). Please correct in the final document.

We are not inconsistent with the Forest Plan or the MSO Recovery Plan. There are no treatments in the project that call for creating single story stands. Due to the existing condition, the two stands comprising 323 acres will be dominated by single story but with regeneration we will improve structural conditions creating multi-storied stands over time.

Within the Fire Risk Reduction Emphasis area, there are approximately 341 acres of restricted habitat and proposed critical habitat in which treatments will reduce canopy closure (from 70-73% to 30-40%) and reduce canopy layers. However, due to the relatively flat nature of the area (18% slopes) and the location of these sites (more southerly aspects, adjacent to well-traveled roads), it is unlikely these4 341 acres could be managed to develop into nesting/roosting habitat. Approximately 477 acres (16%) of target-threshold habitat were identified.

5) Please insert the work "mile" after "1/3" on page 15 of the EA.

Done – see errata sheet

6) We oppose building trails through spotted owl PACs because of increased risk of human caused fire and illegal motorized use. However if a trail is built it must be closed during the owl-breeding season.

The Dry Lake Trail passes through a very small portion of the MSO PAC. The Biological Assessment and Evaluation shows a may affect not likely to adversely affect determination. Benefits to the owl are achieved by obliterating social trails with nest/roost stands. The USFWS has concurred with this finding. Timing restrictions are not needed on this portion of the trail.

Respectfully submitted,

Sam Hitt, Founder
Wild Watershed
/s/ Sam Hitt

John Horning, Executive Director
Forest Guardians
/s/ John Horning